

IN THE CLAIMS:

Please cancel claims 1-33 without prejudice or disclaimer, and substitute new claims 34-66 therefor as follows:

Claims 1-33 (Cancelled).

34. (New) A method for the introduction of a liquid into a molten mass under pressure, comprising the steps of:

(a) bringing said liquid to a predetermined pressure greater than the pressure of said molten mass;

(b) feeding said liquid to a plurality of storage tanks; and

(c) injecting said liquid into said mass at an injection pressure equal to said predetermined pressure by means of a plurality of injectors in respective fluid communication with said plurality of storage tanks.

35. (New) The method according to claim 34, wherein the ratio by weight between said liquid and said molten mass is 1:99 to 25:75.

36. (New) The method according to claim 34, wherein said liquid is a dielectric liquid.

37. (New) The method according to claim 34, wherein said molten mass comprises at least one thermoplastic polymer.

38. (New) The method according to claim 37, wherein said thermoplastic polymer comprises at least one polyolefin.

39. (New) The method according to claim 34, wherein the pressure of the molten mass is about 10 bar to about 1400 bar.

40. (New) The method according to claim 34, wherein said predetermined pressure to which said liquid is brought and at which said liquid is injected is 30-1500 bar.

41. (New) The method according to claim 34, wherein said step a) of bringing the liquid to a predetermined pressure is carried out by means of at least one pump.

42. (New) The method according to claim 41, wherein said pump is a reciprocating positive-displacement pump comprising a plurality of pumping units in respective fluid communication with said plurality of storage tanks through a plurality of feeding lines.

43. (New) The method according to claim 34, wherein said step b) of feeding the liquid is carried out by feeding said liquid to each storage tank of said plurality of storage tanks through at least one pair of liquid feeding lines.

44. (New) The method according to claim 34, wherein said step c) of injecting the liquid is driven mechanically.

45. (New) The method according to claim 34, wherein said step c) of injecting the liquid is carried out into an extruder within which said molten mass is received.

46. (New) The method according to claim 45, further comprising the step of mixing said liquid with said molten mass within said extruder.

47. (New) The method according to claim 45, wherein said extruder is capable of extruding a layer of molten mass onto an electric cable element for the transportation and/or the distribution of electrical power, said electric cable element comprising at least one conductive element.

48. (New) The method according to claim 47, wherein said step c) of injecting the liquid is carried out at a plurality of injection points angularly staggered by a predetermined angle in a zone of the extruder in which said mass is in a molten state.

49. (New) The method according to claim 47, wherein said step c) of injecting the liquid is carried out at a plurality of injection points longitudinally staggered by a predetermined distance in a zone of the extruder in which the mass is in a molten state.

50. (New) The method according to claim 34, further comprising the preliminary step of filtering said liquid.

51. (New) The method according to claim 34, further comprising the step of maintaining said liquid at a predetermined temperature.

52. (New) A plant for the introduction of a liquid into a molten mass under pressure, comprising:

(a) at least one pump for bringing said liquid to a predetermined pressure greater than the pressure of said molten mass;

(b) a plurality of storage tanks of liquid in fluid communication with said at least one pump; and

(c) a plurality of injectors in respective fluid communication with said plurality of storage tanks for injecting said liquid into said molten mass at an injection pressure equal to said predetermined pressure.

53. (New) The plant according to claim 52, wherein said pump is a reciprocating positive-displacement pump comprising a plurality of pumping units in fluid communication with said plurality of storage tanks through a respective plurality of feeding lines.

54. (New) The plant according to claim 53, wherein said feeding lines are arranged in a plurality of pairs, each of said pair of feeding lines being in fluid communication with a respective pair of pumping units and with a tank of said plurality of storage tanks.

55. (New) The plant according to claim 52, wherein said injectors are of the mechanical type.

56. (New) The plant according to claim 55, wherein said injectors are driven by a spring calibrated at said injection pressure.

57. (New) The plant according to claim 52, wherein said plurality of injectors is intended to inject said liquid into an extruder.

58. (New) The plant according to claim 57, wherein said injectors are arranged at a plurality of injection points angularly staggered by a predetermined angle in a zone of the extruder in which said mass is in a molten state.

59. (New) The plant according to claim 58, comprising three injectors angularly staggered from each other by 120°.

60. (New) The plant according to claim 57, wherein said injectors are arranged at a plurality of injection points longitudinally staggered by a predetermined distance in a zone of the extruder in which said mass is in a molten state.

61. (New) The plant according to claim 52, further comprising a tank for feeding the pump maintained at a predetermined pressure.

62. (New) The plant according to claim 61, wherein said predetermined pressure of the feeding tank is 1-5 bar.

63. (New) The plant according to claim 61, further comprising a filter placed between said feeding tank and said pump.

64. (New) The plant according to claim 61, further comprising a pre-loading tank in fluid communication with said tank for feeding the pump.

65. (New) The plant according to claim 64, further comprising a filter at the inlet of said pre-loading tank.

66. (New) The plant according to claim 52, further comprising heating devices in heat-exchange relationship with said at least one pump, said plurality of storage tanks and said plurality of injectors.